

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Sarah Raz		Associate Professor of Psychology Merrill-Palmer Institute and Department of Psychology Wayne State University, Detroit MI	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
School of Social Sciences and School of Education Hebrew University, Jerusalem, Israel	B.A.	1974 - 1976	Education & Sociology
Rachel Shazar Institute of Remedial Education, Jerusalem, Israel.	Special Education Teacher Certificate	1977 - 1978	Learning Disabilities, Developmental Disabilities, Child Psychopathology
Department of Educational Psychology (graduate program), University of Texas (Austin)		1980 - 1982	School Psychology
Department of Psychology, University of Texas (Austin)	M.A.	1982 - 1985	Clinical Psychology
Department of Psychology, University of Texas (Austin)	Ph.D.	1985 - 1988	Clinical Psychology
Children's Memorial Hospital, Northwestern University Medical Center, Chicago	APA Internship	1987- 1988	Clinical Child/Pediatric Psychology

A. Positions and Honors.Academic positions

1980-1982	Department Oriental and African Languages, University of Texas at Austin, Assistant Instructor.
1982-1985	Department of Psychology, University of Texas at Austin, Assistant Instructor , .
March 1989 - July 1989	Institute for the Study of Developmental Disabilities (ISDD), University of Illinois at Chicago, Supervising Psychologist-Administrator.
1989-1990	Memphis State University, Department of Psychology, Visiting Assistant Professor.
1990 – 1995	The University of Memphis (former Memphis State University), Department of Psychology, Assistant Professor.
1995- 2001	The University of Memphis, Department of Psychology, Associate Professor.
2001 -	Wayne State University, Merrill-Palmer Institute and Department of Psychology, Associate Professor.

Other Experiences and Professional Memberships:

September 1985-July 1986	Rehabilitation Institute of Chicago, Pediatric Unit, Pediatric neuropsychology externship.
1986-1987.	American Association of University Women (AAUW) Fellowship (dissertation award).

- 1986 University of Texas at Austin, Office of Graduate Studies, Research Award.
- 1995 University of Memphis Superior Performance in University Research (SPUR) award.

B. Selected Publications (in chronological order)

Peer reviewed journal articles

- Raz, S., Raz, N., Weinberger, D.R., Boronow, T., Pickar, D., Bigler, E.D. and Turkheimer, E.N. (1987). Morphological brain abnormalities in schizophrenia determined by computerized tomography: A problem of measurement? *Psychiatry Research*, 22, 91-98.
- Raz, N., Raz, S., Yeo, R.A., Bigler, E.D., Turkheimer, E.N., and Cullum, M.C. (1987). Relationship between cognitive and morphological asymmetry in dementia of the Alzheimer type: A CT scan study. *International Journal of Neuroscience*, 35, 225-234.
- Raz, S., Raz, N., and Bigler, E.D. (1988). Ventriculomegaly in schizophrenia: Is the choice of controls important? *Psychiatry Research*, 24, 71-77.
- Raz, N., Raz, S., and Bigler, E.D. (1988). Ventriculomegaly in schizophrenia, the role of control groups and the perils of dichotomous thinking. *Psychiatry Research*, 26, 245-248.
- Raz, S., and Raz, N. (1990). Structural brain abnormalities in the major psychoses: A quantitative review of the evidence from computerized imaging *Psychological Bulletin*, 108, 93-108.
- Raz, S. (1993). Structural cerebral pathology in schizophrenia: Regional or diffuse? *Journal of Abnormal Psychology*, 102, 445-452.
- Raz, S. (1994). Gross brain morphology in schizophrenia: a regional analysis of traditional diagnostic subtypes. *Journal of Consulting and Clinical Psychology*, 62, 640-644.
- Raz, S., Foster, M., Briggs, S., Shah, F., Baertschi, J., Riggs, W., Magill, L., Sander, C. (1994). Lateralization of perinatal cerebral insult and cognitive asymmetry: Evidence from neuroimaging. *Neuropsychology*, 8, 160-170.
- Raz, S., Goldstein, R., Shah, F., Hopkins, T., Riggs, W., Magill, L., & Sander, C. (1994). Sex differences in neonatal vulnerability to cerebral injury and their neurodevelopmental implications. *Psychobiology*, 22, 244-253.
- Raz, S., Lauterbach, M.D., Hopkins, T.L., Porter, C.L., Riggs, W.W., Sander, C.J. (1995). Severity of perinatal cerebral injury and developmental outcome: A dose response relationship. *Neuropsychology*, 9, 91-101.
- Raz, S., Lauterbach, M.D., Hopkins, T.L., Glogowski, B.K., Porter, C.L., Magill, L.H., Riggs, W.W., & Sander, C.J. (1995). A female advantage in cognitive recovery from early cerebral insult. *Developmental Psychology*, 31, 958-966.
- Raz, S., Shah, F., & Sander C.J. (1996). Differential effects of perinatal hypoxic risk on early developmental outcome: A twin study. *Neuropsychology*, 10, 429-436.
- Raz, S., Glogowski-Kawamoto, B.K, Yu, A., Hopkins, T.L., Lauterbach, M.D., Porter, C.L., & Sander, C.J. (1998). The effects of perinatal hypoxic risk on developmental outcome in early and middle childhood: A twin study. *Neuropsychology*, 12, 459-467.
- Porter-Stevens, C.L, Raz, S., & Sander, C.J. (1999). Peripartum hypoxic risk and cognitive outcome: A study of term and preterm birth children at early school age. *Neuropsychology*, 13, 598-608.
- Lauterbach, M.D., Raz, S.R., & Sander, C.J. (2001). Neonatal hypoxic risk in preterm birth infants: The influence of sex and severity of respiratory distress on cognitive recovery. *Neuropsychology*, 15, 411-420.
- Hopkins-Golightly, T.L., Raz, S. & Sander, C.J. (2003). The influence of slight to moderate risk for birth hypoxia on acquisition of cognitive and language function in the preterm infant: A cross sectional comparison with preterm-birth controls. *Neuropsychology*, 17, 3-13.

Kronenberg, M.E., Raz, S., & Sander, C.J. (2006). Neurodevelopmental outcome in children born to mothers with hypertension in pregnancy: The significance of suboptimal intrauterine growth. *Developmental Medicine and Child Neurology* 48, 200-206.

Book Chapters:

Raz, S. Structural brain abnormalities in the major psychoses (1989). In Bigler, E.D., Yeo, R.A., and Turkheimer, E.N. (Eds.) *Neuropsychological Functioning and Brain Imaging*, New York: Plenum.

Abstracts

Raz, S., Raz, N., Bigler, E.D., and Turkheimer, E. N. Volumetric assessment of CT abnormalities in schizophrenia. Journal of Clinical and Experimental Neuropsychology, January issue, 1986.

Raz, N., Raz, S., Yeo, R.A., Turkheimer E.N., and Cullum, M.C. Cognitive and morphological asymmetry in Alzheimer's dementia. Journal of Clinical and Experimental Neuropsychology, January issue, 1986.

Pliskin, N., Raz, N., Raz, S., and Weinberger, D.R. Verbal fluency in schizophrenia affected by neuroleptic withdrawal. Journal of Clinical and Experimental Neuropsychology, January issue, 1987.

Raz, S., Weinberger, D., Post, R., and Pickar, D. Regional and diffuse structural cerebral pathology in schizophrenia: A neuroimaging investigation. Journal of Clinical and Experimental Neuropsychology, January issue, 1992.

Raz, S., Shah, F., Sander C.J. Differential effects of risk for perinatal hypoxia on early developmental outcome: A twin study. Journal of the International Neuropsychological Society, January issue, 1996.

Raz, S., Shah, F., Lauterbach, M.D., Hopkins, T.L., and C.J. Sander. Effects of risk for perinatal hypoxia on motor function in childhood: A twin study. Journal of the International Neuropsychological Society, May issue, 1996.

Lauterbach, M.D., Hopkins, T.L., Stevens-Porter, C.L., Glogowski-kawamoto, B.K., Yu, A.W., Gunning-Dixon, F.M., Kronenberg, M.E., Warman, D.M., Raz, S., & Sander, C.J. Differential intellectual recovery from neonatal respiratory distress in males and females: An outcome study of early biological risk. Journal of the International Neuropsychological Society, January issue, 1998.

Raz, S., Glogowski-Kawamoto, B., Yu, A., Kronenberg, M.E., Lauterbach, M.D., Hopkins, T.L., Porter, C.L., Sander, C.J. Behavioral differences between same-sex co-twins discordant for hypoxic risk. Journal of the International Neuropsychological Society, May, 1998.

Stevens C., Raz, S., Dixon, F., Glogowski-Kawamoto, B., Hopkins, T., Lauterbach, M., & Sander, C. The relationship between perinatal hypoxic risk and motor performance at early age. Journal of the International Neuropsychological Society, January issue, 1998.

Kronenberg, M., Raz, S., Nagel, B., Lauterbach, M., Yu, A., Hopkins, T., Gunning-Dixon, F., & Sander, C. Cognitive and motor outcome of children born to women with preeclampsia. Journal of the International Neuropsychological Society, January issue, 2001.

Porter-Stevens, C., Raz, S., Kronenberg, M., Hopkins, T., Lauterbach, M. Gunning-Dixon, F., & Sander, C. Birth-related hypoxia and language development. Journal of the International Neuropsychological Society, January issue, 2002.

Recent Presentations:

- Raz, S., Shah, F., & Sander C.J. Differential effects of risk for perinatal hypoxia on early developmental outcome: A twin study. Presented at the 23rd Annual Meeting of the International Neuropsychological Society, February 1996, Chicago, IL.
- Raz, S., Shah, F., Lauterbach, M.D., Hopkins, T.L., and C.J. Sander. Effects of risk for perinatal hypoxia on motor function in childhood: A twin study. Presented at the European meeting of the International Neuropsychological Society, June 1996, Veldhoven, The Netherlands.
- Glogowski-Kawamoto, B.K., Yu, A.W., Raz, S., & Sander, C., J. Visually guided reaching is associated with perinatal hypoxic risk: An infant twin study. Presented at the annual meeting of the Society for Neuroscience, New Orleans, November 1997.
- Porter, C.L., Raz, S., Glogowski-Kawamoto, B.K., Hopkins, T.L., Lauterbach, M.D., Yu, A., Warman, D.M., Kronenberg, M.E., Mittleman, G., & Sander, C.J. Cognitive development and severity of perinatal acidosis. Presented at the Annual Meeting of the Society for Neuroscience, New Orleans, November 1997
- Lauterbach, M.D., Hopkins, T.L., Stevens-Porter, C.L., Glogowski-Kawamoto, B.K., Yu, A.W., Gunning-Dixon, F.M., Kronenberg, M.E., Warman, D.M., Raz, S., & Sander, C.J. Differential intellectual recovery from neonatal respiratory distress in males and females: An outcome study of early biological risk. Paper presented at the 25th Annual meeting of the International Neuropsychological society, Honolulu, HI, February 1998.
- Raz, S., Glogowski-Kawamoto, B., Yu, A., Kronenberg, M.E., Lauterbach, M.D., Hopkins, T.L., Porter, C.L., Sander, C.J. Behavioral differences between same-sex co-twins discordant for hypoxic risk. Presented the European International Neuropsychological Society Meeting, Budapest, Hungary, July 1998.
- Stevens, C., Raz, S., Gunning-Dixon, F., Glogowski-Kawamoto, T. Hopkins, A. Yu, & Sander, C. The relationship between perinatal hypoxic risk and motor performance at early school age. Presented at the International Neuropsychological Society Meeting, Boston, MA, February 1999.
- Hopkins-Golightly, T., Raz, S., Porter-Stevens, C., Lauterbach, M.D.C., Glogowski-Kawamoto, B., Yu, A., Gunning-Dixon, F., Kronenberg, M.A. The relationship between perinatal hypoxic insult and cognitive and behavioral outcome in school-age children born preterm. Presented at the Society for Research in Child Development, Albuquerque, N.M., April 1999.
- Kronenberg, M., Raz, S., Nagel, B., Lauterbach, M., Yu, A., Hopkins, T., Gunning-Dixon, F. & Sander, C. Cognitive and motor outcome of children born to women with preeclampsia. Presented at the 27th Annual Meeting of International Neuropsychological Society, Chicago, IL, February 2001.
- Porter-Stevens, C., Raz, S., Kronenberg, M., Hopkins, T., Lauterbach, M. Gunning-Dixon, F., & Sander, C. Birth -related hypoxia and language development. Presented at the 28th Annual Meeting of International Neuropsychological Society, Toronto, Canada, February 2002.
- Raz S., Kronenberg M. and Sander, C. The effects of hypertensive disorder of pregnancy and suboptimal intrauterine growth on intellectual and motor function in the preschool years. Endo-Neuro Society Meeting, Maastricht, Netherlands, June 2002
- Raz S. Perinatal adversity and developmental outcome; Israeli Neuropsychological Society Annual meeting, June 2002, Haifa, Israel.
- Lauterbach, M., Raz, S., & Sander, C. Cognitive and motor outcome in preschoolers with history of bacterial infection originating in utero. Presented in the meeting of the International Neuropsychological Society, February 2004, Baltimore, MD.
- Gustafson-DeBastos, A. K., Raz, S., Newman, J., Shomaker, A, Batton, D. The Neuropsychological Outcome of Preterm-Birth Preschoolers Diagnosed with Mild Perinatal Intracranial Hemorrhage. Presented at the Annual Meeting of the International Neuropsychological Society, February 2005, St. Louis, MO.
- Bapp Newman J. Raz, S. Gustafson-DeBastos, A., Schomaker, A., Meachen, S., Batton, D. Differences in neuropsychological development between preterm-birth twins and singletons. Presented at the Annual Meeting of the International Neuropsychological Society, February 2006, Boston, MA.
- Gustafson-DeBastos, A., Raz, S., Newman, J., Meachen, S., Perry, J., Elliot, P., and Batton, D.

Principal Investigator/Program Director: Raz, Sarah

The relationships between nucleated red blood cell counts at birth and neuropsychological outcome in preterm-birth preschoolers. To be presented at the Annual Meeting of the International Neuropsychological Society, February 2007, Portland OR.

Raz, S. Suboptimal Intrauterine Growth and Maternal Hypertension: Effects on Neuropsychological Outcome. To be included in a symposium presentation at the Biennial Meeting of the Society for Research in Child Development (SRCD), March 2007, Boston, MA.

Meachen, S., Perry, J., Raz, S., DeBastos, A., Bapp-Newman, J., and Batton, D., Extreme prematurity: Do two additional weeks of gestation matter at the edge of viability? Abstract submitted to the European International Neuropsychological Society.

C. Research Support History

Project title "Cerebral ventricular size at six months of age and neurodevelopmental outcome at one year in preterm infants: An ultrasonographic pilot investigation",

Principal Investigator: Sarah Raz, Ph.D.

NIH Biomedical Research Support Grant - \$5,850.

Project Period: February 1991 - March 1992.

Faculty Research Grant Award \$3,000.

Principal Investigator: Sarah Raz, Ph.D.

Project title: "Intracranial hemorrhage in the preterm infant: Evidence for increased left hemisphere susceptibility during gestation".

Project Period: May 1992- August 1993.

“Sex differences in cognitive effects of early CNS insult”

Principal Investigator: Sarah Raz, Ph.D.

Agency: National Institutes of Health (NICHD)

Project description: the purpose of the project was to examine sex differences in cognitive outcome following perinatal complications after controlling for type and severity of the relevant complications, sociodemographic factors, and perinatal status.

Type: FIRST award (R29 HD32244)
(\$349,997 direct cost).

Project period: May 1994 - May 2001.

Role: PI